

EXHIBIT A

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO

LINDA JOHNSTONE and L.D. by and
through her mother, LINDA JOHNSTONE,
individually and on behalf of a class of all
persons and entities similarly situated,

Plaintiff,

v.

CROSSCOUNTRY MORTGAGE, LLC.

Defendant.

Case No. 1:22-cv-01111-BMB

Presiding: Hon. Bridget Meehan Brennan

Declaration of Plaintiff's Expert
Aaron Woolfson

DECLARATION OF EXPERT AARON WOOLFSON

I, Aaron Woolfson, state and declare as follows:

1. I have been retained by Plaintiff's counsel to provide structure to, and then analyze, the electronic Call Detail Records ("CDR" or "CDRs"), customer lists, and other associated information that has been, or will be, provided in this lawsuit reflecting the calling done by or at the direction of CrossCountry Mortgage, LLC. ("CrossCountry Mortgage", "CrossCountry" or "Defendant").

2. More specifically, I have been asked to opine whether there is a reliable method to identify which calls in CDR reports maintained by Defendant's dialing platform vendor were made to telephone numbers that resulted in a connected call to a number that had been on the national Do-Not-Call ("DNC") list for more than thirty (30) days, and where there were two (2) or more calls to the number within 365 days. I have also been asked to identify any telephone number that were wireless when called, as well as those numbers that were called while wireless, but the number was ported within fifteen (15) days of the call.

3. As described in this declaration, it is my conclusion that using call records produced in this matter there is a reliable method to identify the following: calls that resulted in a

1 connection to a number that had been on the national DNC list for more than thirty (30) days, and
 2 that the number received two (2) or more calls within 365 days. I am also able to reliably identify
 3 which of the telephone numbers that were on the DNC list for more than thirty (30) days and were
 4 called two (2) or more times within 365 days were wireless numbers when called, and whether the
 5 number to which the call was placed had been ported within fifteen (15) days.

6 4. This report reflects the results of my study of the underlying facts, independent
 7 analysis of the data and documents provided by CrossCountry Mortgage to counsel for Plaintiff,
 8 and third parties. My rate is \$440.00 per hour for expert engagements, and \$675.00 per hour for
 9 depositions, trial, and arbitration appearances. I am personally familiar with the matters that are
 10 contained within this declaration, and if called to testify, I can accurately and competently testify
 11 as to them.

12 13 **Qualifications and Expert Engagements.**

14 5. I have over 25 years of experience in developing and analyzing databases and
 15 telephone systems and establishing the interfaces between telephone systems and the networks that
 16 convey calls. I have implemented call recording and call data collection and retention systems for
 17 commercial, government, aerospace, telecommunications, and payroll industries. My professional
 18 experience includes serving as an expert witness in cases where I evaluated the technical aspects of
 19 telephone systems, including whether they had a random or sequential number generator.

20 6. My qualifications and curriculum vitae are attached to this expert report as
 21 **Exhibit 1**. A list of the other cases in which I have testified as an expert at trial or by deposition
 22 during the previous four years is attached as **Exhibit 2**. I have been qualified by both Federal and
 23 State courts.¹ My testimony has been relied upon by courts in both individual and class actions,²

24 ¹ *ABM Industries Overtime Cases* (Case No. JCCP 4502, San Francisco Superior Court) (2017) 19
 25 Cal. App. 5th 277, footnote 5, at page 8, (“[T]here was evidence in the record that Woolfson had
 26 previously qualified as an expert in both state and federal court ...”) (*ABM Industries Overtime*
 27 *Cases*, A132387, A133077, A133695, 19 Cal. App. 5th 277 (Dec. 11, 2017; pub. ord. Jan. 10,
 28 (footnote continued))

1 by plaintiffs and defendants. My opinions have also been relied upon in arbitrations, including
2 those involving TCPA claims.

3 7. I was the developer of the automated Verification of Deposit (“VOD”) and
4 Verification of Mortgage (“VOM”) system that was used by Chase, Wells Fargo, Bank of
5 America, as well as some regional banks and mortgage lenders, to facilitate the review of
6 mortgage applications by call center staff. These systems required a great deal of integration
7 between the telephone systems and the financial institution’s computer systems, and relied heavily
8 on my deep understanding of database and timekeeping integration technologies. It also required
9 me to build interfaces to the ACH³ exchanges, and with Global Payments and other large
10 automated electronic inter-exchanges of financial information. Other processes necessitated
11 integrating fax and OCR⁴ capabilities as well as enhanced call routing – inbound and outbound –
12 including predictive elements of enhanced call processing, and the precise timings of these events.

13 8. I am the inventor of “Canvas”, a programming language that I developed for
14 interfacing between telephone systems and telephone networks, capable of processing hundreds of
15 thousands of calls a day. To date, hundreds of millions of calls have been handled by Canvas on
16 behalf of call centers, financial institutions, conference calling companies, and organizations
17 offering Interactive Voice Response (“IVR”) services.⁵

18 _____
19 2018)). (Exhibit 3).

20 ² “The Court notes that Mr. Woolfson’s expert report appears to include information related to the
21 merits of the case in addition to class certification issues.” *Gaines v. Law Office of Patenaude &*
22 *Felix, A.P.C.*, Case No. 3:13-cv-01556-JLS-DHB (S.D. Cal.), Sep. 21, 2015, ECF 132, at 3.

23 ³ Automated Clearing House (“ACH”).

24 ⁴ The OCR (“Optical Character Recognition”) process as integrated into the automatic monitoring
25 of telephone calls in real time to determine whether the call was a voice or fax call, and if a fax
26 call, decoding the contents of each fax-page into machine readable text *while* a fax was being
transmitted to the bank’s computers for integration with a database.

⁵ IVR is a technology that allows a computer to interact with humans through the use of voice
and/or DTMF tones inputted via a telephone keypad. DTMF (“Dual Tone Multi Frequency”) is the
signal you generate when you press a telephone’s touch keys.

1 9. I have developed highly available, upwardly scalable databases for use in the
2 telecommunications industry. The databases and telephone systems that I have personally
3 developed and/or coded are used by telephone companies and call centers throughout the United
4 States and Canada to catalogue and index various customer-calling activities. Some of the
5 companies that have used my databases and/or telephone equipment (which I personally created
6 and manufactured) have included Japan Telecom, Experian, Bank of America, Wells Fargo Bank,
7 JP Morgan, Bank of the West, Cogent Communications, Zone Telecom (ANPI), Aion Networks,
8 Smartcall Conferencing, and First National Collection Bureau, Inc., and the United States
9 government, including the Department of Justice.

10 10. Through my hands-on work experience in developing databases and telephone
11 systems, I have become very familiar with the technology related to telephone systems and their
12 interfaces with the networks through which calls are processed, received, and transmitted. I am
13 also familiar with how dialing systems work, and how telephone systems handle inbound and
14 outbound calls.

15 11. I have been responsible for the design and development of specialized hardware and
16 software systems that are highly dependent upon the capabilities of the computers upon which they
17 run, and are in use at mission-critical applications, including Patriot Missile (SAIC, Patriot RTOS),
18 Air Traffic Control Systems (Kongsberg Geospatial Corporation), and Point Lepreau Nuclear
Generating Station, New Brunswick, Canada (Energ   NB).

19 12. I held a Certificate of Public Convenience and Necessity⁶ (“CPCN”) – a special
20 license and compliance certification granted to companies that provide essential public services,
21 such as telephone corporations. The California Public Utilities Commission granted my most
22 recent CPCN on July 18, 2017. This was a re-issue of my initial CPCN granted to TelSwitch, Inc.
23 on June 10, 1994, which I held for approximately eighteen (18) years before taking a hiatus from
24 _____

25 ⁶ Certificate of Convenience and Necessity U-5410-C granted to TelSwitch, Inc. on 06-10-1994
26 (Decision 94-06-022). Reissued as U-7327-C on 07-18-2017 (Decision 17-07-009).

1 providing public telephone services. The license originally granted to me in 1994 allowed me to
 2 interconnect the equipment that I designed, built and programmed, with the phone network for the
 3 purpose of providing wholesale and retail telecommunications services.

4 13. I have also been qualified as an expert in matters involving the TCPA and have
 5 previously been engaged on behalf of defendants and plaintiffs to analyze records of calls and,
 6 among other things, compare call records for their inclusion on the national DNC list.

7 14. For example, in *Wright v. eXp Realty, LLC*, No. 6:18-cv-01851-PGB-EJK (M.D.
 8 Fla.), I was engaged on behalf of defendant eXp to analyze call records and, among other things,
 9 compare them against records of leads from various sources, and to identify which numbers were
 10 authoritatively associated with telephone companies on the dates that the calls were made.

Expertise Specifically Related to Database Work.

11 15. I was relied upon as an expert witness in the case of *Hines v. KFC*, filed in the
 12 United States District Court, Southern District of California (Case No. 09cv2422 JM (POR)). In
 13 *Hines*, the court granted plaintiff's motion for class certification and certified plaintiff's meal
 14 period and rest break claims based on my analysis after finding that I am an "expert in the
 15 compilation and analysis of databases"

16 16. I was expert for the plaintiffs in *Albert H. Cicairos, Frank A. Daniel, Richard*
 17 *Wheeler and George Thompson v Summit Logistics, Inc.* and *Kenneth Bluford v Safeway Stores,*
 18 *Inc.* (Case No. CV014837 [Consolidated with Case No. CV028541] Superior Court of California,
 19 County of San Joaquin).

20 17. In addition, I served as an expert in the *ABM Industries Overtime Cases* (Case No.
 21 JCCP 4502, San Francisco Superior Court). Relying upon my expert finding, the Appellate Court
 22 reversed the trial court's ruling and certified the plaintiffs' proposed wage and hour classes. The
 23 court noted that there was sufficient evidence contained within my expert report to support
 24 certification of the classes and subclasses, and that my experience was sufficient to allow my expert
 25 report to be admitted as evidence for that purpose. (**Exhibit 3**).

26 18. I was also expert in *Beatriz Aldapa And Elmer Avalos v. Fowler Packing Company,*

1 *Inc., Ag Force, LLC, Fowler Marketing International LLC*, (Case No. 1:15-CV-00420-DAD-SAB
2 ED, Ca.), where the employer used Datatech to maintain an accounting of piece-work and non-
3 piece-work hours worked by agricultural workers. The court order in *Fowler Packing* is attached as
4 **Exhibit 4**.

5 19. I have applied similar methods to structure large amounts of unstructured data on
6 behalf of defendants Verizon Wireless and Collecto in *Lofton v. Verizon* (Case No. 3:13-cv-
7 05665) and *Lofton v. Collecto* (Case No. 4:13-cv-03293-YGR). In *Lofton v. Collecto*, I was
8 ordered by the District Court of the Northern District of California to reconstruct a database from
9 information that was in Verizon's possession that the plaintiff stated was "un-structurable" and
10 useless for purposes of analysis and determination of the results of calls that took place. I was
11 able to complete the re-structuring of Verizon's data so that the parties could reach a successful
12 settlement. The portion of the Court's Order from *Lofton v. Verizon* instructing me to create a
13 database from Verizon's unstructured data is attached as **Exhibit 5**.

14 **Expertise Specifically Related to Outbound Dialing Systems in Call Centers.**

15 20. I have over twenty-five years of hands-on experience in telecommunications, in
16 the design and programming of the equipment that handles calls. In specific, I was responsible
17 for the development of specialized hardware and software systems, called Rapid Announce and
18 Rapid Record that have been used in both telephone company central offices and in call centers,
19 for the pacing, dialing, and measurement of phone calls, and has cumulatively handled hundreds
20 of millions of calls. At its peak use, Rapid Announce processed 240,000 inbound and 280,000
21 outbound calls per day for companies such as First National Collection Bureau.

22 21. Rapid Announce was primarily used to match the pacing of outbound calls with
23 the availability of agents to accept the calls once they were answered. Rapid Announce also
24 evaluated the connected calls to determine whether the phone was answered by an answering
25 machine or a live person. Based upon the availability of the agents and the type of call that was
26 being placed, the system would then transfer the call to the correct type of agent, or skill-set
27 group, to handle the particular circumstances for which the call was received, or dialed.

22. Rapid Record was responsible for handling the recording and media storage of inbound calls, as well as the implementation of a technology that I developed called AggravationSense. AggravationSense was designed to measure the cadence and speed at which an individual spoke. By measuring the cadence and speed of the speech against a baseline of background noise, AggravationSense would proactively patch in a customer service supervisor in advance of any party asking to speak with one.

Materials and Documents Reviewed and Relied Upon.

23. In conducting my analysis and preparing my conclusions and opinions, I relied upon the following materials and information:

I. Materials that I relied upon that originated in this matter:

- (a) The First Amended Complaint (ECF 38); and,
- (b) Calling records:
*"CCM_000063.xlsx", "CCM_000064.xlsx", "CCM_000065.xlsx",
"CCM_000066.xlsx", "CCM_000067.xlsx", "CCM_000068.xlsx",
"CCM_000069.xlsx", "CCM_000070.xlsx", "CCM_000071.xlsx",*
- (c) Standard Call Log Layout, with Example:
"CCM_000061.xlsx", "CCM_000062.xlsx"

II. Electronic database resources that are available to me:

- (a) The FTC's NDNC Registry.^{7, 8}

⁷ TelSwitch, Inc's FTC Organization ID is 10159990-70991, Subscription Account Number (SAN) 10376173-476173-21.

⁸ Every day, the FTC produces a complete list of the telephone numbers that are on the NDNC registry. By using SQL queries to compare the telephone numbers that were called by the Defendant to the index of each day's NDNC Registry, and the incremental additions and deletions of numbers from that list, I was able to determine which of the numbers appearing within CDRs were also on the NDNC registry, and whether those numbers were on the NDNC registry for more than thirty (30) days when they were called. To accomplish this, I applied the FTC's NDNC Registry to tag the isDNC status on each telephone number to determine whether the number was on the NDNC Registry for more than thirty (30) days before the call was connected to the number.

- (b) TelLingua national number data exchange, historical.^{9,10}
- (c) The National Exchange Carrier Association (“NECA”) North American Numbering Plan 1000-block assignments database.
- (d) iConectiv™ WDNC port database^{11, 12}

Methods and Tools Used to analyze Records.

24. I create and analyze databases using Structured Query Language (SQL). A

⁹ TelLingua is a company based in Texas that offers a historical database of all of the National Exchange Carrier Association (“NECA”) numbering assignments, as well as TelCordia’s historical Carrier Assignments and NeuStar’s historical Number Portability “isPorted” indication, and serves as a central repository for the historical information used by telephone companies for the proper routing of telephone calls and by experts to determine current and historical company-name and service-type assignments. I used TelLingua because it is the same authoritative database that telephone companies use when tagging numbers for historical isWireless and isPorted purposes. TelLingua is reliably and accurately able to provide the data from NeuStar and TelCordia to their customers for real-time and historical purposes, and is used by dozens of large telephone companies, including Utility Telephone and Consolidated Communications, for purposes of obtaining the authoritative routing information from NECA, TelCordia, and NeuStar, for real-time and historical purposes.

¹⁰ TelLingua’s isWireless processing engine allows a file containing phone calls to be tagged with labels indicating whether the number called was wireless (colloquially known as “isWireless”) and the host Operating Company Number (“OCN”) on the date indicated in the call record. I use the TelLingua service by compiling a list of the calls that were contained within the production, and sending the unique telephone number / call dates to TelLingua using a .csv flat file. Then I use the return-results that TelLingua compiled using the telephone companies’ data to tag each call record within the selection of calls in the CDRs with isWireless, date, Carrier of Record and Operating Company Number, and applied additional filters to determine the total number of records to include.

¹¹ FCC order FCC-15-35A1 (03/27/2015) explicitly mandated *continued* availability of iConectiv’s data for purposes of compliance with the TCPA. (¶142). The historical information *does not* contain subscriber information, only carrier of record and line type. Before number portability, this would have been a simple task of looking at the Local Exchange Routing Guide (“LERG”), or absent access to the LERG, finding the area codes and prefixes from an online collection of national phone books. TelSwitch, Inc. is a reseller and authorized user of iConectiv data.

¹² In *Perrong v. Call Identified as Connor*, No. 1:22-cv-04479-CPO-EAP (D.N.J., Camden Vicinage), “plaintiff has queried the database of iConectiv. the company charged by the Federal Communications Commission to administer the Number Portability Administration Center, which is the master database which lists which telephone provider services a particular number, among other information required to route telephone calls to the proper provider.” (ECF No. 3)

1 database is a computerized compilation of data organized into tables, each table having columns
2 (attributes), with column headings, and rows of information. Tables that share at least one
3 attribute in common are “related.” Tables without a common attribute may still be related via
4 other tables with which they do share a common attribute. The pathways relating those separate
5 tables are called “joins.” Once tables have been related by a join, a user may view the combined
6 information in the joined tables to derive new and/or useful information. To access such
7 information, a user sends queries to the database, which executes the queries and retrieves the
8 requested information from the tables in the database. A database, however, only recognizes
9 queries written in complex “query languages.” The most common query language is SQL. A
10 proper query in this language consists of one or more “clauses.” Common types of clauses are
11 SELECT, WHERE, FROM, HAVING, ORDER BY, and GROUP BY clauses. Thus, to compose
12 a proper inquiry, a user must understand the structure and content of the relational database as
13 well as the syntax of the specific query language.

14 25. By using a set of standardized SQL queries, I am able to tag each call record
15 according to (a) the date of a telephone call; and (b) the disposition of the call, if one is present;
16 and (c) the length of the call; and (d) any other data field contained in the call records. I am also
17 able to add (e) whether the number was on the Federal DNC list, and if so, when it was added; and
18 (f) whether the number appears in any other file that was produced, such as on lead lists or
19 summary sheets. Using SQL, I am able to also associate other information that is extrinsic to the
20 worksheets provided that may provide additional guidance to the trier of fact, such as the name of
21 the telephone company to which the number was serviced by on the date that the number was
22 called.

23 **Steps I take when Organizing and Analyzing Call Records.**

24 26. I start by opening each of the files that contain call records data
25 (collectively referred to as “Call Detail Records” or “CDRs”). I do this to (a) determine
26 the format that the call records were stored in, and then (b) to determine what pre-

1 processing I would need to conduct in order to achieve an import of the calls.¹³

2 27. I then import the CDRs file into SQL database tables using Microsoft SQL™
3 Service Management Studio to apply a set of filters to include only calls to valid telephone
4 numbers that were made that:

- 5 a. Were made to a number that contained precisely ten digits; and,
- 6 b. Were made to a number that started with a 2 through 9; and,
- 7 c. Were contained within structurable data¹⁴; and,
- 8 d. Had an associated date; and,
- 9 e. Were placed to area codes that were subject to the TCPA, according to
10 the FTC (**Exhibit 6**); and,
- 11 f. Indicated that the call was connected as identified by one of the
12 following dispositions¹⁵: *Answering Machine*, *"Call Back Later"*, *"DNQ Delinquent BK FC"*, *"DO NOT CALL BACK"*, *"Does Not Qualify -"*, *"Fax"*, *"Live Transfer Disconnected -"*, *"Not Interested"*,
13 *"Transfer Successful"*, *"Wrong Number or Disconnected"*, *"Add to DNC"*, *"Agent Error"*, *"Bad Lead - Return to Vendor"*, *"Bad Phone Number"*, *"Call Abandoned"*, *"Called - Contacted Callback_calendar Event"*, *"Called - No Contact_Left Message"*, *"Change to Nurture"*,
14 *"Contacted - Schedule Calendar Event"*, *"DNQ Credit Score"*, *"DNQ Equity"*, *"DNQ Income"*, *"Do Not Call"*, *"Does Not Qualify"*, *"Does Not Qualify -"*, *"File Started - Exported to Encompass"*, *"Force Stop"*,
15 *"General Comment"*, *"Live Transfer Disconnected"*, *"No Benefit"*, *"Not Interested"*, *"Transferred To 3rd Party"*, *"Transferred to LO"*, *"Answering Machine"* ; and,
- 16 g. Was not ported within fifteen (15) days; and,

21 _____
22 ¹³ I typically do not need to apply any pre-process to the CDRs, as most CDRs originate from
23 electronic call data capture systems that are already Electronic Data Interface ("EDI") capable.

24 ¹⁴ I conducted this to confirm that the calls were structurable and conformed to a normalized
25 database layout specification in which data is aligned to the designated columns. (e.g. all data was
26 contained in the columns allocated for that proper data type).

27 ¹⁵ Defendant's data indicated a connection status with a positive duration of time for connection
28 (e.g. *"talk_time"* >= 1) or disposition = "answering machine" with a *"bill time"* > "0:00:00"

- h. Were placed to a number that had been on the national DNC list for more than thirty (30) days, according to the FTC; and,
- i. The number to which the call was placed had received two (2) or more calls within a 365 day period.

28. Finally, I prepare a set of data files that can be used to exchange with the telephone companies so that I am able to identify the subscriber to the telephone number, based upon a well-defined format called an Electronic Data Interchange (“EDI”) format, to query the telephone company databases in order to obtain the subscribership information.

Telephone Companies databases maintain subscriber information and residential / business line classifications in electronic format as part of their standard record keeping.

29. Wireless and wireline carriers maintain historical records that can be used to identify the residential or business classification for any particular phone number, as well as contact information (**Exhibit 7**, properly redacted) As part of record-keeping requirements imposed upon them by the FCC, telephone companies must maintain those items for the reporting of residential and business line classifications, as well as being able to respond to subpoenas. They also use this information to route customer service calls to the correct residential or business service center,

30. The line type and customer information attributes are also maintained to support local-number-portability (“LNP”) requests. In other words, when someone wishes to move their number from one carrier to another, they are required to provide certain requisite information, such as a name and contact information, which must match then match the other carrier’s records from where the number was being ported. These exchanges of port-in/port-out requests are handled electronically, and exchanged between and amongst the phone carriers¹⁶ using a process called

¹⁶ LNP includes both non-mobile and mobile carriers. Companies, regardless of the carrier type are required to support Local Number Portability (“LNP”). The National Portability Administration Center (“NPAC”) is responsible for maintaining the database of the national (footnote continued)

1 Electronic Data Interchange (“EDI”) protocol. The EDI process encompasses a well-defined,
2 regimented set of informational exchanges, and provides an efficient manner to handle, and route,
3 port-in and port-out requests using a common set of data attributes.

4 31. I have become familiar with the manner in which telephone companies maintain
5 these records to handle their own customer service and reporting requirements, as well as to
6 provide support for the EDI protocol. Both in my role in providing billing and customer service
7 software to phone companies, and in my role as a consulting expert for phone companies who are
8 involved in litigation, I am familiar with the type of information that phone companies maintain
9 on behalf of their customers.

10 32. As an example, I was the expert for Verizon Wireless in *Lofton v. Verizon Wireless*
11 (*VAW*) LLC, No. 13-cv-05665-YGR (N.D. Cal.). In the course of my work on that case, I came to
12 understand that Verizon Wireless maintained records of which numbers were residential or
13 business subscribers. In addition, I learned which types of information, which included line
14 subscribership details that were maintained on a historical basis. Similarly, I am aware that other
15 companies, such as AT&T Wireless and T-Mobile, maintain similar information for both
16 compliance and customer support purposes. This information is also maintained so that calls for
17 invoicing purposes can be rated and billed properly, and so that subpoenas can be properly
18 responded to.

19 33. I also formerly ran a consumer telephone company, called Tel-One Network
20 Services, which was similarly expected to maintain both business and residential information on
21 subscribers’ numbers, as well as contact information. Part of my responsibility at Tel-One
22 Network Services was to interface with other telephone companies such as Pacific Bell (now

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numbering inventory, and as part of the FCC’s order granting authority to iConnectiv to maintain
this, they agreed to continue to make data available for TCPA compliance purposes. (FCC 15-35, ¶
142).

27

28

AT&T) during the process of onboarding new subscribers, because we had to work with the proper business or residential department, depending upon the type of the product being offered.

Identification of subscribers and line-classification by Telephone Number.

34. The prescribed manner to request subscriber and line classification information from telephone companies is in the EDI format, which entails placing telephone numbers into a 10-digit (“10D”) format and organizing it by each telephone company for the consumption by the EDI process handling software.¹⁷ When presented with requests in comma-separated-value (“csv”) format, file can be efficiently consumed by carriers, the results of which are then provided toward the requesting company in a conformed database ready-format csv format for automated import and alignment within the database containing the requested numbers. The return data generally contains the contact information and a flag indicating that the number is either (R)esidential, or (B)usiness. By using the *Carrier Of Record* and *Operating Company Number* from the TelLingua, Inc. data, I am able to build an EDI information exchange

35. Using these filters and criteria that I apply as part of my standard set of analysis methodology, I am able to accurately and reliably identify the calls that were made, and the telephone numbers to which those calls were placed, that could be encompassed within Plaintiff’s proposed class definition.

Steps that I applied to the Defendant’s Data to conduct an analysis of the Call Detail Records.

36. I started with the complete set of data that was provided, which included 7,173,936 calls contained within the source files listed in paragraph 23(I)(b). I started by removing 6,066,147 records that appeared to be redacted from the production sets

¹⁷ I am familiar with this process, having been responsible for processing the inbound requests, and preparing the outbound requests, on behalf of telephone companies, including EzTel and Reunion Telecom.

1 CCM_063-070. I then removed 4,275 calls that the call direction did not indicate it was
 2 an outbound call. I then removed 225,685 calls that did not have a disposition indicating
 3 that the call was connected. I then removed 219 calls to numbers that were not
 4 authoritatively identified as being to a telephone number that was contained within the
 5 FTC's list of United States area codes that are subject to the TCPA.¹⁸

6 37. The remaining records after the removal of non-TCPA area codes, such as
 7 those records indicating a call to a Canadian number, or a special service number that was
 8 not geographically distinguishable, appeared to be made to telephone numbers that were
 9 assigned to phone companies within the United States as of the date that they were called.

10 38. I then removed 375,865 calls to telephone numbers that were not on the
 11 national DNC list for more than thirty (30) days before the call was made. I then removed
 12 1,897 calls that were to numbers that were on the DNC list for more than (30) days, but
 13 the number had been ported within fifteen (15) days before call. And finally, I removed
 14 15,060 records where the telephone number to which the call was placed was on the DNC
 15 list for more than thirty days, but there were not two (2) or more connected calls to that
 16 particular number within 365 days.

All items within "Defendant Call Records" files [CCM_063-070] :	7,169,063
Additional calls that were in [ccm_0000071] that were not already contained within [CCM_063-070]:	4,873

Records for calls that were REDACTED:

(6,066,147)

Removal of any calls that were not tagged "outbound"

(4,275)

¹⁸ This process removes any numbers made to Canada or other area codes that are dialable from the United States as part of the North American Numbering Plan, but are not part of the United States dial plan.

1	Removal of any calls that had zero duration and a bill_time of zero, or a disposition indicating that the call was not connected.	(225,685)
2	Records that contained numbers that were not part	
3	of the FTC's recognized TCPA eligible Area Codes:	(219)
4	Removal of any duplicates (none)	-
5		
6	Any number that was not on the DNC list for more than thirty days	(375,865)
7	Any call to a number that was on the DNC list for more than thirty (30)	
8	days, but the number had been ported within fifteen (15) days before	(1,897)
9	the call.	
10	Any number that was on the DNC list for more than thirty days, but there	(15,060)
11	were not two (2) or more calls within 365 days.	-
12	Quantity of unique numbers to which the 484,788 calls were connected:	
13		
14	82,448	

39. This resulted in a sum of **484,788** connected calls to **82,448** unique telephone numbers to which the calls were connected were on the national DNC list for more than thirty (30) days, and there were two or more connected calls to that number within 365 days, and the number had not been ported in the fifteen (15) days before the call was made¹⁹. A list of those telephone numbers and the amount of calls is attached as **Exhibit 8**, which includes two (2) calls to the Named Plaintiffs' number ending in -5137:

¹⁹ Out of the 484,788 calls made to 82,448 unique numbers, there were 412,952 calls made to 69,434 numbers that were wireless on the date when called, and 71,836 calls to 13,015 numbers that were wireline when called. Based upon the isPorted indication, one (1) of the unique numbers was both wireless and wireline during the period when called.

CALL_ID	DATE	TIME	phone #	CALL_TYPE	DISPOSITION	CAMPAIGN	BILL_TIME
1194932	03/08/22	9:51 AM	-5137	Outbound	Do Not Call	A A A Revival Leads Aged	0:00:18
838393	03/02/22	12:30 PM	-5137	Outbound	Answering Machine	A A A Revival Leads Aged	0:00:24

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct. Executed this 15th day of December, 2023 in Pleasant Hill, California.



Aaron Woolfson